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Issue Date: 05/10/04

Group ID: A

User ID: JxMason KS: 17,879

Page 1

Warning [US Reference: Page:11 Posn:1 ]

has an issue date that does not match the patent number

Warning [Pages Of US References:]

page 4 has no references  
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page 7 has no references  
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Warning [Pages Of Foreign References:]

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page 16 has no references

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Rule 47   Continuing Data   PCT   Disclaimer

Yes   No   No

Microfiche Appendix   CPA tag

Yes   No

Foreign Priority Claimed: No

Acknowledged: No

State Code: CA   Country Code:

Text Endorsement: 09334530.061699

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JACKET

<u>SERIAL NUMBER</u>	<u>FILING DATE</u>	<u>CLASS</u>	<u>SUBCLASS</u>	<u>GAU</u>
09/334,530	06/16/99	717	130	2122

FOREIGN PRIORITY

Country   Document Number   Date

DISCLAIMER

/ /

TITLE

Profiling execution of computer programs

MICROFICHE APPENDIX

ASSISTANT EXAMINER:

First:   Middle:   Last:

PRIMARY EXAMINER:

First:   Middle:   Last:

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CLAIMS ALLOWED

Total   Print

45   / 1 /

DRAWINGS

Sheets   Figures   Print

32   / 37 / Y /

BLUE SLIP INFORMATION

<u>SERIAL NUMBER</u>	<u>CLASS</u>	<u>SUBCLASS</u>	<u>GAU</u>
09/334,530	717	130	2122

INDEP. CLAIMS

TOTAL CLAIMS

1,24

45

BLUE SLIP (Page 1)

INTERNATIONAL CLASSIFICATION

Class   SubClass

G06F   9/44

CROSS-REFERENCES

Class   SubClass

717   131;217;128;129;154;158

712   208;215

714   38;39

TERM EXTENSION

0

FIELD OF SEARCH

Class   SubClass

717   140;130;127;128;131;136;139;148;132;151;158;154

712 208;215

714 39;47;38

OATH

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PCT INFO

CONTINUING DATA (Page 1)

LINE	CODE	SERIAL NUMBER	FILING DATE	STATUS	DOCUMENT NO.	ISSUE DATE
104	71	09/239,134	01/28/1999	03 ✓		/ /

REFERENCES (Page 1) SERIAL NUMBER: 09/334,530

FORM 892

U.S. REFERENCES

U.S. Pat No.	Date	Patentee	Class	SubClass
*6,226,789	05/2001	Tye et al.	717	138
No issue date available.				
*6,496,922	12/2002	Borrill	712	209
No issue date available.				
*6,470,492	10/2002	Bala et al.	717	128
No issue date available.				
5,774,287	06/1998	Leonhardt et al.	360	48
*6,477,683	11/2002	Killian et al.	716	1
No issue date available.				
*6,405,327	06/2002	Sipple et al.	714	39
No issue date available.				
*6,480,862	11/2002	Gall	707	205
No issue date available.				
5,847,955	12/1998	Mitchell et al.	700	86
*6,026,478	02/2000	Dowling	712	24
No issue date available.				
5,796,939	08/1998	Berc et al.	714	47
*6,374,369	04/2002	O[3 Donnell	714	38
No issue date available.				
*6,175,957	01/2001	Ju et al.	717	156
No issue date available.				
*6,253,215	06/2001	Agesen et al.	707	206
No issue date available.				

FOREIGN REFERENCES

Foreign Doc No. Date Country Class SubClass

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

TITLE: A performability model for soft real[58 time systems, author:

Youn et al, IEEE, Jan 1994.

TITLE: Commercializing profile[58 driven optimization, autohr: Conte et al, IEEE, 1995.

REFERENCES (Page 2) SERIAL NUMBER: 09/334,530

FORM 892

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
5,911,073	06/1999	Mattson, Jr. et al.	717	104
<1,10>5,796,939	08/1998	Berc et al.		
5,613,118	03/1997	Heisch et al.	717	158
*6,295,644	09/2001	Hsu et al.	717	158
No issue date available.				
*6,202,205	03/2001	Saboff et al.	717	151
No issue date available.				
*6,047,363	04/2000	Lewchuk	711	213
No issue date available.				

FOREIGN REFERENCES

Foreign Doc No. Date Country Class SubClass

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

TITLE: Exploiting hardware performance with counters with flow and context sensitive profiling, author: Ammons, ACM, 1997.

TITLE: Profiling in the ASP codesign environment, author: Parkinson et al, ACM, 1995.

-----  
TITLE: ProfileMe: hardware support for instruction-level profiling on  
out-of-order processors, author: Dean et al, ACM, 1997. ✓

-----  
Title: Using branch Handling Hardware Support Profile-Driven  
Optimization, Conte et al, ACM, 1994. ✓

=====

REFERENCES (Page 3) SERIAL NUMBER: 09/334,530  
FORM 1449

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
3,544,969	12/1970	Rakoczi	340	172.5
3,781,823	12/1973	Senese	3470	172.5
4,084,235	04/1978	Hirtle et al.	364	200
4,455,602	06/1984	Baxter, III et al.	364	200
4,575,797	03/1986	Gruner et al.	364	200
5,638,525	06/1997	Hammond et al.	395	385
<1,10>5,796,939	08/1998	Berc et al.		
5,802,272	09/1998	Sites et al.	395	183.21
5,822,578	10/1998	Frank et al.	395	591
5,832,205	11/1998	Kelly et al.	395	185.06
5,930,509	07/1999	Yates et al.	395	707
5,958,047	09/1999	Panwar et al.	712	237

FOREIGN REFERENCES

<u>Foreign Doc No.</u>	<u>Date</u>	<u>Country</u>	<u>Class</u>	<u>SubClass</u>
WO 96/24895	08/1996	WOX	G06F	9/22

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

Burroughs, Preliminary Edition, B 1700 Systems Reference Manual,

Burroughs Corporation (1972).

Burroughs, B 1700 Systems Micro Implementation Language (MIL)

Reference Manual, Burroughs Corporation (1973).

Anton Chernoff, et al., FX[49 32, A Profile-Directed Binary

Translator, IEEE Micro, vol. 18 No. 2 pp. 56-64 (Mar./Apr., 1998).

T.M. Conte, et al., [37 Accurate and practical profile-driven compilation using the profile buffer, [38 [0 Proceedings of the 29[hu th [1 Annual International Symposium on Microarchitecture, Paris, France, pp. 36-45 (Dec. 1996).

T.M. Conte, et al., [37 Hardware based profiling: An effective technique for profile-driven optimization, [38 [0 International Journal of Parallel Programming, vol. 24, No. 2 (Feb. 1996).

T.M. Conte, et al., [37 Using branch handling to support profile-driven optimization, [38 [0 Proceeding of the 27[hu th [1 Annual International Synposium on Microarchitecture San Jose, CA (Dec. 1994).

REFERENCES (Page 4) SERIAL NUMBER: 09/334,530  
FORM 1449

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
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FOREIGN REFERENCES

<u>Foreign Doc No.</u>	<u>Date</u>	<u>Country</u>	<u>Class</u>	<u>SubClass</u>
------------------------	-------------	----------------	--------------	-----------------

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

J.S. Cox et al., [37 Commercializing profile-driven optimization. [38

[0 Proceedings of the 28<sup>th</sup> [1 Hawaii International Conference on

System Sciences, vol. 1, Maui, HI, pp. 221-228 (Jan. 1995).

Digital Equipment Corp., White Paper: How DIGITAL FX[49 32 Works (Sep.

1997) <http://www.digital.com/semiconductor/amt/fx32/fx-white.htm>.

Ebcio glu and Altman, IBM Research Report DAISY: Dynamic Compilation  
for 100% Architectural Compatibility, IBM Research Division (1996).

Ronald M. Guffin, Microdiagnostics for the Standard Computer MLP-900  
Processor, IEEE Transactions on Computers, vol. C-20 No. 7, pp.  
803-808 (Jul. 1971).

Linley Gwennap, MDR Technical Library Special Report, Intel[3 s Merced  
and IA-64 Technology and Market Forecast, IA-64 Software Model[13  
Chapter 3 excerpt Microprocessor Report, MicroDesign Resources (Jul.  
20, 1998).

Linley Gwennap, MDR Technical Library Special Report, Intel[3 s Merced  
and IA-64: Technology and Market Forecast, Executive Summary,  
Microprocessor Report, MicroDesign Resources (Jul. 20, 1998).

Linley Gwennap, First Merced Patent Surfaces, Intel Document Reveals  
Processors With Dual Instruction Sets, Microprocessor Report,  
MicroDesign Resources (Jul. 20, 1998).

R.E. Hank, et al., Proceedings of the 28<sup>th</sup> [1 Annual International  
Symposium on Microarchitecture, pp. 158-168 (Dec. 1995).

Raymond J. Hookway, et al., Combining Emulation and Binary Translation  
(Aug. 28, 1997) <http://www.digital.com/info/DTJ01HM.HTM>.

-----  
Harold W. Lawson, Jr., et al., Functional Characteristics of a  
Multilingual Processor, IEEE Translatins on Computers, vol. C-20, No.  
7, pp. 732-742 (Jul., 1971).

-----  
K.N.P. Menezes, [37 Hardware-based profiling for program  
optimization, [38 [0 Ph.D. thesis, Department of Electrical and  
Computer Engineering, North Carolina State University, Raleigh, North  
Carolina (1997).

-----  
Nanodata Corporation, QM-1 Hardware level User[3 s Manual (1975).

-----  
Nanodata Corporation, QM-2 Processor (1976).

-----  
Robert F. Rosin, Contemporary Concepts of Microprogramming and  
Emulation, Computing Surveys, vol. 1 No. 4, pp. 197-212 (Dec. 1969).

-----  
Robert F. Rosin, An Environment for Research in Microprogramming and  
Emulation, Communications of the ACM, vol. 15 No. 8, pp. 748-760 (Aug.  
1972).

-----  
Standard Computer Corp, IC-9000 Central Processing' Unit[13 Principles  
of Operation (undated[13 possibly 1969).

-----  
W.T. Wilner, Design of the Burroughs B1700, Fall Joint Computer  
Conference, pp. 489-497 (1972).

-----  
W.T. Wilner, Burroughs B1700 Memory Utilization, Fall Joint Computer

✓D

Conference, pp. 579-586 (1972).

REFERENCES (Page 5) SERIAL NUMBER: 09/334,530  
FORM 1449

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
<3,1>3,544,969	12/1970	Rakoczi		
<3,2>3,781,823	12/1973	Senese		
<3,3>4,084,235	04/1978	Hirtle et al.		
<3,4>4,455,602	06/1984	Baxter, III et al.		
<3,5>4,575,797	03/1986	Gruner et al.		
5,542,109	07/1996	Blomgren et al.	395	800
<3,6>5,638,525	06/1997	Hammond et al.		
5,659,679	08/1997	Alpert et al.	395	183.1
<1,10>5,796,939	08/1998	Berc et al.		
<3,8>5,802,272	09/1998	Sites et al.		
5,802,373	09/1998	Yates et al.	395	705
<3,9>5,822,578	10/1998	Frank et al.		
<3,10>5,832,205	11/1998	Kelly et al.		
<3,11>5,930,509	07/1999	Yates et al.		
5,949,415	09/1999	Lin et al.	345	335
<3,12>5,958,047	09/1999	Panwar et al.		
6,000,028	12/1999	Chernoff et al.	712	226
*6,091,897	07/2000	Yates et al.	395	708
No issue date available.				

FOREIGN REFERENCES

Foreign Doc No.    Date    Country    Class    SubClass

8

<3,1>WO 96/24895 08/1996 WOX

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

Burroughs, Preliminary Edition, B-1700 Systems Reference Manual,  
Burroughs Corporation (1972).

Burroughs, B-1700 Systems Micro Implementation Language (MIL)  
Reference Manual, Burroughs Corporation (1973).

Anton Chernoff, et al., FX[49 32, A Profile-Directed Binary  
Translator, IEEE Micro, vol. 18 No. 2 pp. 56-64 (Mar./Apr., 1998).

T.M. Conte, et al., [37 Accurate and practical profile-driven  
compilation using the profile buffer, [38 [0 Proceedings of the 29[hu  
th [1 Annual International Symposium on Microarchitecture, Paris  
France, pp. 36-45 (Dec. 1996).

REFERENCES (Page 6) SERIAL NUMBER: 09/334,530  
FORM 1449

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
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FOREIGN REFERENCES

<u>Foreign Doc No.</u>	<u>Date</u>	<u>Country</u>	<u>Class</u>	<u>SubClass</u>
------------------------	-------------	----------------	--------------	-----------------

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

T.M. Conte, et al., [37 Hardware based profiling: An effective  
technique for profile-driven optimization, [38 [0 International Journal  
of Parallel Programming, vol. 24, No. 2 (Feb. 1996).

T.M. Conte, et al., [37 Using branch handling hardware to support  
profile-driven optimization, [38 [0 Proceedings of the 27[hu th [1

Annual International Symposium on Microarchitecture San Jose, CA (Dec. 1994).

J.S. Cox et al., [37 Commercializing profile-driven optimization. [38] Proceedings of the 28th Hawaii International Conference on System Sciences, vol. 1 Maui, HI, pp. 221-228 (Jan. 1995).

Digital Equipment Corp., White Paper: How DIGITAL FX[49 32 Works (Sep. 1997) <http://www.digital.com/semiconductor/amt/fx32/fx-white.htm>.

Ebcioğlu and Altman, IBM Research Report, DAISY: Dynamic Compilation for 100% Architectural Compatibility, IBM Research Division (1996).

Linda Geppert et al., Transmeta[3 s Magic Show, IEEE Spectrum, vol. 37 No. 5, pp. 26-33 (May 2000).

Ronald M. Guffin, Microdiagnostics for the Standard Computer MLP-Processor, IEEE Transactions on Computers, vol. C-20 No. 7, pp. 803-808 (Jul. 1971).

Linley Gwennap, MDR Technical Library Special Report, Intel[3 s Merced and IA-64 Technology and Market Forecast, IA-64 Software Model [13 Chapter 3 excerpt Microprocessor Report, MicroDesignResources (Jul. 20, 1998).

Linley Gwennap, MDR Technical Library Special Report, Intel[3 s Merced and IA-64: Technology and Market Forecast, Executive Summary, Microprocessor Report, MicroDesign Resources (Jul. 20, 1998).

Linley Gwennap, First Merced Patent Surfaces, Intel Document Reveals

Processors With Dual Instruction Sets, Microprocessor Report,  
MicroDesign Resources (Jul. 20, 1998).

R.E. Hank, et al., Proceedings of the 28<sup>th</sup> Annual International  
Symposium on Microarchitecture, pp. 158-168 (Dec. 1995).

Raymond J. Hookway, et al., Combining Emulation and Binary Translation  
(Aug. 28, 1997) <http://www.digital.com/info/DTJP01H.HTM>.

Harold W. Lawson, Jr., et al., Functional Characteristics of a  
Multilingual Processor, IEEE Transactions on Computers, vol. C-20, NO.  
7, pp. 732-742 (Jul., 1971).

K.N.P. Menezes, [37 Hardware-based profiling for program  
optimization, [38 Ph.D. thesis, Department of Electrical and  
Computer Engineering, North Carolina State University, Raleigh, North  
Carolina (1997).

Nanodata Corporation, QM-1 Hardware level User's Manual (1975).

Nanodata Corporation, QM-2 Processor (1976).

REFERENCES (Page 7) SERIAL NUMBER: 09/334,530  
FORM 1449

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
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FOREIGN REFERENCES

<u>Foreign Doc No.</u>	<u>Date</u>	<u>Country</u>	<u>Class</u>	<u>SubClass</u>
------------------------	-------------	----------------	--------------	-----------------

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

Robert F. Rosin, Contemporary Concepts of Microprogramming and

Emulation, Computing Surveys, vol. 1 No. 4, pp. 197-212 (Dec. 1969).

Robert F. Rosin, An Environment for Research in Microprogramming and  
Emulation, Communications of the ACM, vol. 15 No. 8, pp. 748-760 (Aug.  
1972).

Standard Computer Corp., IC-9000 Central Processing Unit [13 Principles  
of Operation (undatedc[13 possibly 1969]).

W.T. Wilner, Design of the Burroughs B1700, Fall Joint Computer  
Conference, pp. 489-497 (1972).

W.T. Wilner, Burroughs B1700 Memory Utilization, Fall Joint Computer  
Conference, pp. 579-586 (1972).

REFERENCES (Page 8) SERIAL NUMBER: 09/334,530  
FORM 1449

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
*6,154,857	11/2000	Mann		
		No issue date available.		
*6,157,970	12/2000	Gafken et al.		
		No issue date available.		
*6,163,764	12/2000	Dulong et al.		
		No issue date available.		
*6,219,774	04/2001	Hammond et al.		
		No issue date available.		
*6,237,073	05/2001	Dean et al.		
		No issue date available.		
*6,240,526	05/2001	Petivan et al.		
		No issue date available.		

\*6,351,784 02/2002 Neal et al.  
No issue date available.

\*6,397,379 05/2002 Yates Jr. et al.  
No issue date available.

\*6,463,582 10/2002 Lethin et al.  
No issue date available.

FOREIGN REFERENCES

<u>Foreign Doc No.</u>	<u>Date</u>	<u>Country</u>	<u>Class</u>	<u>SubClass</u>
0 324 308	07/1989	EPX	G06F	9/30
WO 97/50031	12/1997	WOX	G06F	9/455
WO 98/13740	04/1998	WOX		
WO 98/28689	07/1998	WOX	G06F	11/00
WO 98/38575	09/1998	WOX	G06F	11/00
WO 98/59292	12/1998	WOX	G06F	9/45
WO 99/03037	01/1999	WOX	G06F	11/00
WO 99/089188	02/1999	WOX	G06F	11/00
WO 99/08191	02/1999	WOX	G06F	12/00

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

Compaq Computer Corp., Compiler Writer[3 s Guide for the Alpha 21264  
(1999).

Intel Corporation, Intel Architecture Software Developer[3 s Manual,  
[i passim [l (1997).

REFERENCES (Page 9) SERIAL NUMBER: 09/334,530  
FORM 1449

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
4,514,803	04/1985	Agnew et al.	364	200

4,779,187	10/1988 Letwin		
4,812,975	03/1989 Adachi et al.	364	300
5,115,500	05/1992 Larsen		
5,155,835	10/1992 Belsan		
5,241,664	08/1993 Ohba et al.		
5,301,287	04/1994 Herrell et al.		
5,307,504	04/1994 Robinson et al.	395	800
5,335,331	08/1994 Murao et al.		
5,361,340	11/1994 Kelly et al.		
5,432,795	07/1995 Robinson	371	19
5,454,117	09/1995 Puziol et al.	395	800
5,481,684	01/1996 Richter et al.	395	375
5,481,693	01/1996 Blomgren et al.	395	375
5,515,518	05/1996 Stiles et al.	395	375
5,542,059	07/1996 Blomgren	395	375
5,568,646	10/1996 Jaggar		
5,574,927	11/1996 Scantlin	395	800
5,598,546	01/1997 Blomgren	395	385
5,608,886	03/1997 Blomgren et al.	395	586
5,619,666	04/1997 Coon et al.		
5,636,366	06/1997 Robinson et al.	395	490
5,652,869	07/1997 Herdeg et al.	395	500
5,664,159	09/1997 Richter et al.	395	500
5,678,032	10/1997 Woods, deceased et al.	395	500
5,685,009	11/1997 Blomgren et al.	395	800
5,715,421	02/1998 Akiyama et al.		

26

5,721,927	02/1998 Baraz et al.	395	705
5,751,982	05/1998 Morley	395	800
5,754,878	05/1998 Asghar et al.	395	800
5,774,686	06/1998 Hammond et al.	395	385

FOREIGN REFERENCES

Foreign Doc No.	Date	Country	Class	SubClass
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OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

REFERENCES (Page 10) SERIAL NUMBER: 09/334,530

FORM 1449

U.S. REFERENCES

U.S. Pat No.	Date	Patentee	Class	SubClass
5,781,750	07/1998	Blomgren et al.	395	500
5,781,792	07/1998	Asghar et al.	395	800.35
5,784,640	07/1998	Asghar et al.	395	800.35
5,790,824	08/1998	Asghar et al.	395	385
5,794,068	08/1998	Asghar et al.	395	800.35
5,838,962	11/1998	Larson	395	586
5,838,978	11/1998	Buzbee	395	705
5,842,017	11/1998	Hookway et al.	395	707
5,884,057	03/1999	Blomgren et al.	395	375
5,901,308	05/1999	Cohn et al.		
5,903,760	05/1999	Farber et al.	395	707
5,905,855	05/1999	Klaiber et al.	395	183.07
5,920,721	07/1999	Hunter et al.	395	705
5,935,220	08/1999	Lumpkin et al.		
5,958,061	09/1999	Kelly et al.	714	1

5,999,736	12/1999 Gupta et al.			
6,005,551	12/1999 Osborne et al.			
6,006,029	12/1999 Bianchi et al.	395	500.45	
*6,011,908	01/2000 Wing et al.	395	182.17	
No issue date available.				
*6,014,735	01/2000 Chennupaty et al.	712	210	
No issue date available.				
*6,021,265	02/2000 Nevill			
No issue date available.				
*6,021,489	02/2000 Popplingher	712	239	
No issue date available.				
*6,029,004	02/2000 Bortnikov et al.			
No issue date available.				
*6,031,992	02/2000 Cmelik et al.	395	705	
No issue date available.				
*6,032,247	02/2000 Asghar et al.	712	35	
No issue date available.				
*6,035,393	03/2000 Glew et al.	712	237	
No issue date available.				
*6,044,221	03/2000 Gupta et al.			
No issue date available.				
*6,070,009	05/2000 Dean et al.			
No issue date available.				
*6,081,890	06/2000 Datta	713	1	
No issue date available.				
*Re. 36,766	07/2000 Krauskopf	711	203	
No issue date available.				

FOREIGN REFERENCES

Foreign Doc No.   Date   Country   Class   SubClass

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

REFERENCES (Page 11) SERIAL NUMBER: 09/334,530

FORM 1449

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
*<9,1>4,514,803	04/1985	COON et al. <sup>85</sup> Asnew		
	04/1985			
4,636,940	01/1987	Goodwin, Jr.	717	128
4,750,112	06/1988	Jones et al.	364	200
<9,2>4,779,187	10/1988	Letwin		
<9,3>4,812,975	03/1989	Adachi et al.		
<9,4>5,115,500	05/1992	Larsen		
<9,5>5,155,835	10/1992	Belsan		
5,168,557	12/1992	Shibuya	712	207
<9,6>5,241,664	08/1993	Ohba et al.		
5,241,638	08/1993	Mork et al.	711	207
<9,7>5,301,287	04/1994	Herrell et al.		
<9,8>5,307,504	04/1994	Robinson et al.		
<9,9>5,335,331	08/1994	Murao et al.		
5,339,422	08/1994	Brender et al.	714	4
<9,10>5,361,340	11/1994	Kelly et al.		
5,404,476	04/1995	Kadaira	711	207
<9,11>5,432,795	07/1995	Robinson		
<9,12>5,454,117	09/1995	Puziol et al.		
<9,13>5,481,684	01/1996	Richter et al.		
<9,14>5,481,693	01/1996	Blomgren et al.		
5,483,647	01/1996	Yu et al.	713	100
5,487,156	01/1996	Popescu et al.	712	217
<9,15>5,515,518	05/1996	Stiles et al.		

83

<9,16>5,542,059 07/1996 Blomgren

<5,6>5,542,109 07/1996 Blomgren et al.

5,560,013 09/1996 Scalzi et al. 717 138

<9,17>5,568,646 10/1996 Jaggar

<9,18>5,574,927 11/1996 Scantlin

5,574,929 11/1996 Pieterse et al. 712 30

5,590,309 12/1996 Chencinski et al. 395 472

<9,19>5,598,546 01/1997 Blomgren

<9,20>5,608,886 03/1997 Blomgren et al.

<9,21>5,619,666 04/1997 Coon et al.

FOREIGN REFERENCES

Foreign Doc No. Date Country Class SubClass

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

REFERENCES (Page 12) SERIAL NUMBER: 09/334,530

FORM 1449

U.S. REFERENCES

U.S. Pat No. Date Patentee Class SubClass

5,628,016 05/1997 Kukol 717 140

<9,22>5,636,366 06/1997 Robinson et al.

<9,23>5,652,869 07/1997 Herdeg et al.

5,657,474 08/1997 Taine 711 163

<5,8>5,659,679 08/1997 Alpert et al.

<9,24>5,664,159 09/1997 Richter et al.

5,673,407 09/1997 Poland et al. 395 375

<9,25>5,678,032 10/1997 Woods, deceased et al.

<9,26>5,685,009 11/1997 Blomgren et al.

<9,27>5,715,421 02/1998 Akiyama et al.

<9,28>5,721,927 02/1998 Baraz et al.

5,732,238 03/1998 Sarkozy 711 135

5,742,780 04/1998 Caulk, Jr. 395 382

<9,29>5,751,982 05/1998 Morley

<9,30>5,754,878 05/1998 Asghar et al.

5,764,947 06/1998 Murphy et al. 703 20

5,768,500 06/1998 Agrawal et al. 714 47

<9,31>5,774,686 06/1998 Hammond et al.

<10,1>5,781,750 07/1998 Blomgren et al.

5,781,758 07/1998 Morley 395 500

<10,2>5,781,792 07/1998 Asghar et al.

<10,3>5,784,640 07/1998 Asghar et al.

<10,4>5,790,824 08/1998 Asghar et al.

<10,5>5,794,068 08/1998 Asghar et al.

<5,11>5,802,373 09/1998 Yates et al.

5,805,877 09/1998 Black et al. 395 586

5,812,864 09/1998 McCoy et al. 703 26

5,815,720 09/1998 Buzbee 717 158

5,819,064 10/1998 Razdan et al. 703 27

<10,6>5,838,962 11/1998 Larson

<10,7>5,838,978 11/1998 Buzbee

<10,8>5,842,017 11/1998 Hookway et al.

5,854,913 12/1998 Goetz et al. 712 210

FOREIGN REFERENCES

Foreign Doc No. Date Country Class SubClass

24

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

REFERENCES (Page 13) SERIAL NUMBER: 09/334,530  
FORM 1449

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
5,870,763	02/1999	Lomet	707	202
<10,9>5,884,057	03/1999	Blomgren et al.		
<10,10>5,901,30805/1999		Cohn et al.		
<10,11>5,903,76005/1999		Farber et al.		
<10,12>5,905,85505/1999		Klaiber et al.		
<10,13>5,920,72107/1999		Hunter et al.		
<10,14>5,935,22008/1999		Lumpkin et al.		
5,941,827	08/1999	Papaioannou et al.	711	163
<5,15>5,949,415	09/1999	Lin et al.		
<10,15>5,958,06109/1999		Kelly et al.		
5,968,162	10/1999	Yard	712	203
<10,16>5,999,73612/1999		Gupta et al.		
<5,17>6,000,028	12/1999	Chernoff et al.		
6,002,872	12/1999	Alexander, III et al.	717	127
6,003,038	12/1999	Chen	707	103 R
<10,17>6,005,55112/1999		Osborne et al.		
<10,18>6,006,02912/1999		Bianchi et al.		
6,006,277	12/1999	Talati et al.	709	313
*<10,19>6,011,90801/2000		Wing et al.		
No issue date available.				
*<10,20>6,014,73501/2000 Chennupaty et al.				

Name & Date

20

No issue date available.

\*<10,21>6,021,26502/2000 Nevill

No issue date available.

\*6,021,484 02/2000 Park

712 41

No issue date available.

\*<10,22>6,021,48902/2000 Poplingher

No issue date available.

\*<10,23>6,029,00402/2000 Bortnikov et al.

No issue date available.

\*<10,24>6,031,99202/2000 Cmelik et al.

No issue date available.

\*<10,25>6,032,24702/2000 Asghar et al.

No issue date available.

\*<10,26>6,035,39303/2000 Glew et al.

No issue date available.

\*6,044,220 03/2000 Breternitz, Jr.

717 139

No issue date available.

\*<10,27>6,044,22103/2000 Gupta et al.

No issue date available.

\*<2,6>6,047,363 04/2000 Lewchuk

No issue date available.

\*6,052,771 04/2000 Heller

712 34

No issue date available.

\*<10,28>6,070,00905/2000 Dean et al.

No issue date available.

\*6,076,144 06/2000 Peled et al.

711 125

No issue date available.

FOREIGN REFERENCES

Foreign Doc No. Date Country Class SubClass

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

REFERENCES (Page 14) SERIAL NUMBER: 09/334,530

FORM 1449

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
*6,081,665	06/2000	Nilsen et al.	717	116
No issue date available.				
*<10,29>6,081,890 06/2000 Datta				
No issue date available.				
*<10,30>Re. 36,766 07/2000 Krauskopf				
No issue date available.				
*<5,18>6,091,897 07/2000 Yates et al.				
No issue date available.				
*6,092,188	07/2000	Corwin et al.	712	239
No issue date available.				
*6,115,809	09/2000	Mattson	712	239
No issue date available.				
*6,119,204	09/2000	Chang et al.	711	141
No issue date available.				
*6,141,683	10/2000	Kraml et al.	709	220
No issue date available.				
*<8,1>6,154,857 11/2000 Mann				
No issue date available.				
*<8,2>6,157,970 12/2000 Gafken et al.				
No issue date available.				
*<8,3>6,163,764 12/2000 Dulong et al.				
No issue date available.				
*6,195,748	02/2001	Chrysos et al.	712	227
No issue date available.				
*6,205,545	03/2001	Shah et al.	712	237
No issue date available.				
*6,212,493	04/2001	Huggins et al.	703	22
No issue date available.				
*<8,4>6,219,774 04/2001 Hammond et al.				
No issue date available.				
*6,233,678	05/2001	Bala	712	240
No issue date available.				

16

\*<8,5>6,237,073 05/2001 Dean et al.  
No issue date available.

\*<8,6>6,240,526 05/2001 Petivan et al.  
No issue date available.

\*6,256,728 07/2001 Witt et al.  
No issue date available.

\*6,304,948 10/2001 Motoyama et al.  
No issue date available.

\*6,308,321 10/2001 Schooler  
No issue date available.

\*6,336,135 01/2002 Niblett et al.  
No issue date available.

\*<8,7>6,351,784 02/2002 Neal et al.  
No issue date available.

\*6,351,844 02/2002 Bala  
No issue date available.

\*6,353,924 03/2002 Ayers et al.  
No issue date available.

\*6,363,336 03/2002 Banning et al.  
No issue date available.

\*6,374,367 04/2002 Dean et al.  
No issue date available.

\*6,381,628 04/2002 Hunt  
No issue date available.

\*6,381,735 04/2002 Hunt  
No issue date available.

\*<8,8>6,397,379 05/2002 Yates, Jr. et al.  
No issue date available.

\*<8,9>6,463,582 10/2002 Lethin et al.  
No issue date available.

\*6,470,442 10/2002 Arimilli et al.  
No issue date available.

\*6,473,846 10/2002 Melchior  
No issue date available.

FOREIGN REFERENCES

Foreign Doc No. Date Country Class SubClass

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

REFERENCES (Page 15) SERIAL NUMBER: 09/334,530

FORM 1449

U.S. REFERENCES

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
*6,557,094	04/2003	Pechanek <i>et al.</i>	712	209
No issue date available.				
*6,560,693	05/2003	Puzak <i>et al.</i>	712	207
No issue date available.				
*6,591,414	07/2003	Hibi <i>et al.</i>	717	151
No issue date available.				

FOREIGN REFERENCES

Foreign Doc No. Date Country Class SubClass

<8,1>0 324 308	07/1989	EPX		
<8,2>WO 97/50031	12/1997	WOX		
<8,3>WO 98/13740	04/1998	WOX		
<8,4>WO 98/28689	07/1998	WOX		
<8,5>WO 98/38575	09/1998	WOX		
<8,6>WO 98/59292	12/1998	WOX		
<8,7>WO 99/03037	01/1999	WOX		
WO 99/08188	02/1999	WOX	G06F	11/00
<8,9>WO 99/08191	02/1999	WOX		

OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)

Compaq Computer Corp., Compiler Writer[3 s Guide for the Alpha 21264  
(1999) [www.alphalinux.org/archives/axp-list/June1999/0472.html](http://www.alphalinux.org/archives/axp-list/June1999/0472.html).

Dean, Profile Hardware Support for Instruction-Level Profiling on

Out-of-Order Processors, IEEE 1997, pp. 292-302.

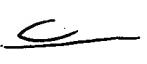
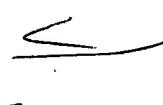
Linda Geppert et al., Transmeta[3 s Magic Show, IEEE Spectrum, vol. 37, No. 5, pp. 26-33 (May 2000).

Intel Corporation, Intel Architecture Software Developer[3 s Manual, [i passim [l (1997).

Kim and Tyson: Analyzing the Working Set Characteristics of Branch Execution, IEEE 1998.

Larus and Schnarr: EEL: Machine-Independent Executable Editing, ACM Sigplan, 1995.

Lipasti and Shen: Exceeding the Dataflow Limit via Value Prediction, IEEE, 1996.

Veen: Dataflow MACHine Architecture, ACM Computing Surveys vol. 18 No. 4 pp. 365-96 (Dec. 1986). 

**REFERENCES (Page 16) SERIAL NUMBER: 09/334,530**  
**FORM 1449**

**U.S. REFERENCES**

<u>U.S. Pat No.</u>	<u>Date</u>	<u>Patentee</u>	<u>Class</u>	<u>SubClass</u>
---------------------	-------------	-----------------	--------------	-----------------

**FOREIGN REFERENCES**

<u>Foreign Doc No.</u>	<u>Date</u>	<u>Country</u>	<u>Class</u>	<u>SubClass</u>
------------------------	-------------	----------------	--------------	-----------------

**OTHER REFERENCE CITATIONS (incl. Author, Title, Date, Pertinent Pages, etc.)**

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